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NOTES ON THE SPIDER GENUS *EILICA* (ARANEAE: GNAPHOSIDAE)

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Abstract.—The genus *Baeriella* Simon is transferred from the Cybaeodinae (Clubionoidea) to the Laroniinae (Gnaphosidae) and newly synonymized with *Eilica* Keyserling; its type species, *B. myrmecophila* Simon, is placed as a senior synonym of *Eilica puno* Platnick and Shadab. Three new species are described: *E. amambay* from Paraguay and *E. daviesae* and *E. bedourie* from Australia. The male of *E. contacta* Platnick is described for the first time.

The spider genus *Eilica* is of particular interest both because of its widespread, Gondwanian distribution (Platnick, 1975) and because of the close associations that apparently exist between at least some of its species and ants (Noonan, 1982). The sister group of *Eilica,* the Laurasian genus *Callilepis* (Platnick, 1976b), includes at least some species that seem to feed exclusively on ants (Heller, 1976).

Because *Eilica* has such a wide distribution, it is not surprising that different generic names have been used for species living on different continents. Earlier studies (Platnick, 1975; Platnick and Shadab, 1981) have placed five generic names (*Gytha* Keyserling, *Laronia* Simon, *Gnaphosoides* Hogg, *Caridrassus* Bryant, and *Fedotovia* Charitonov) as junior synonyms of *Eilica,* although the synonymy of the last of these names has yet to be confirmed by examination of its type species. During a recent visit to the Muséum National d'Histoire Naturelle, Paris, I discovered yet another generic synonym, *Baeriella* Simon (1903), based on a myrmecophilous species from Argentina overlooked in previous studies because all recent workers and catalogers have associated the genus with clubionoid rather than gnaphosoid spiders. Simon had assigned *Baeriella,* along with the Mediterranean genus *Cybaeodes* and the African genus *Andromma,* to his gnaphosid subfamily Cybaeodinae. As indicated elsewhere (Platnick, 1984), this subfamily was correctly removed from the Gnaphosidae by subsequent workers (although its correct position remains uncertain). Simon's association of *Baeriella* with *Cybaeodes* and *Andromma,* however, was erroneous. Examination of Simon's type specimens indicates that *Baeriella myrmecophila* is a true gnaphosid and a senior synonym of *Eilica puno* Platnick and Shadab, a species previously found only living with ants in the Peruvian Andes.

In addition to recording this synonymy, I take the opportunity here to describe previously unknown taxa and list new locality records for known *Eilica* species, based on material new to the collections of the American Museum of Natural History (AMNH) or kindly made available by the following curators and collectors: Dr. A. Timotheo da Costa, Museu Nacional, Rio de Janeiro (MNRJ); Dr. V. E. Davies, Queensland Museum, Brisbane (QMB); Mr. P. Hillyard, British Museum (Natural History), London (BMNH); Mr. M. Hubert, Muséum National d'Histoire Naturelle, Paris (MNHN); Dr. H. W. Levi, Museum of Comparative Zoology, Cambridge

(MCZ); Dr. A. A. Lise, Museu de Ciências Naturais, Porto Alegre (MCN); Dr. V. Mahnert, Muséum d'Histoire Naturelle, Geneva (MHNG); Dr. E. A. Maury, Museo Argentino de Ciencias Naturales, Buenos Aires (MACN); and Dr. L. E. Watrous, Field Museum of Natural History, Chicago (FMNH). The illustrations are by Dr. M. U. Shadab of the American Museum. The format of the descriptions follows that of Platnick (1975).

Eilica Keyserling

Eilica Keyserling, 1891:29 (type species by monotypy *Eilica modesta* Keyserling). Platnick, 1975:3. Platnick and Shadab, 1981:184.

Baeriella Simon, 1903:271 (type species by monotypy *Baeriella myrmecophila* Simon). **New Synonymy.**

Synonymy. Specimens of *Baeriella myrmecophila* possess the multiple cheliceral laminae (Fig. 1) diagnostic of *Eilica.*

Eilica myrmecophila (Simon), **New Combination**
Fig. 1

Baeriella myrmecophila Simon, 1903:272, figs. A–C (seven female syntypes from Lara, Tucuman, Argentina, in MNHN, examined).

Eilica puno Platnick and Shadab, 1981:185, figs. 7, 8 (female holotype from Puno, Puno, Peru, in AMNH, examined). **New Synonymy.**

Diagnosis. The shield-shaped epigynum (Platnick and Shadab, 1981, fig. 7) is diagnostic of females, as is the peculiarly elongated medial cheliceral lamina (Fig. 1).

Male. Unknown.

Female. Described by Simon (1903) and Platnick and Shadab (1981).

Distribution. Simon's specimens were collected at an elevation of 4,000 m in the Argentine Andes by G.-A. Baer, where they were found (together with their characteristically shaped egg cases) living with the ant *Camponotus punctulatus* Mayr. Platnick and Shadab's specimens were collected at an elevation of 3,850 m in the Peruvian Andes by G. R. Noonan and M. Moffett, living with the ant *Camponotus inca* Emery, as detailed by Noonan (1982).

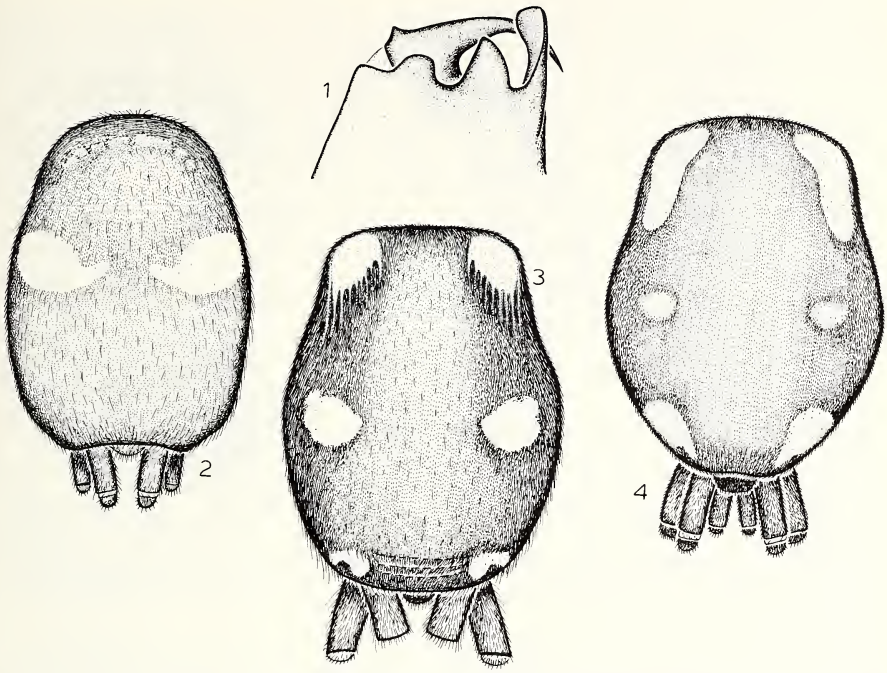
Synonymy. Although the Argentine specimens are lighter in coloration than the Peruvian ones, no structural differences have been detected between them.

Eilica modesta Keyserling

Eilica modesta Keyserling, 1891:30, pl. 1, figs. 9, 9a, 9b (male holotype from Blumenau, Santa Catarina, Brazil, should be in BMNH, lost). Platnick, 1975:6, figs. 3, 8–11; 1977:397.

Zelotes pallidenotatus Mello-Leitão, 1938:113, figs. 32, 33 (female holotype from Roca, Río Negro, Argentina, in Museo de La Plata, examined). First synonymized by Platnick and Shadab, 1983:101.

New records. **Argentina:** *Jujuy:* Abra Pampa, Feb. 1966 (E. A. Maury, MACN), 1♀. *San Juan:* Valle Fértil, Caucete, Oct. 1980 (M. E. Galiano, MACN), 1♀. **Brazil:**



Figs. 1–4. 1. *Eilica myrmecophila* (Simon), tip of chelicera, ventral view. 2–4. Dorsal view of abdomen. 2. *E. amambay,* new species. 3. *E. daviesae,* new species. 4. *E. bedourie,* new species.

Minas Gerais: 20 mi N Governador Valadares, Mar. 24, 1984, under rock on sandy streamside (L. N. Sorkin, AMNH), 1♀. *Santa Catarina:* Blumenau (M. Witte, MCZ), 1♀.

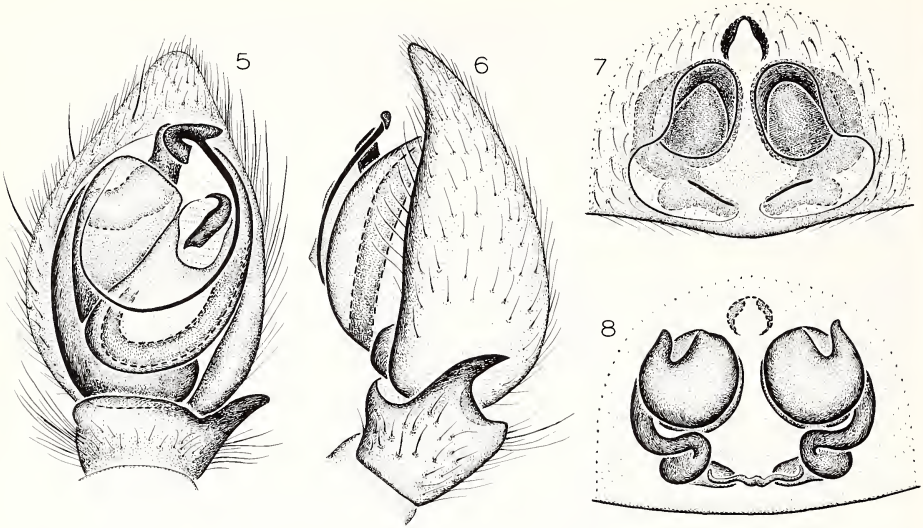
Distribution. Argentina, Uruguay, and southeastern Brazil.

Eilica trilineata (Mello-Leitão)

Laronia trilineata Mello-Leitão, 1941:173, fig. 63 (female holotype from Alemania, Salta, Argentina, should be in Museo de La Plata, lost).

Eilica trilineata: Platnick, 1975:6, figs. 14, 15. Platnick and Shadab, 1981:185, figs. 1, 2.

New records. **Argentina:** *Chubut:* Los Cipreses, Nov. 1982 (Ramirez, MACN), 6♂♂, 1♀. *Salta:* Juramento (MNRJ), 1♀. **Brazil:** *Rio Grande do Sul:* Estação Ecólogica Aracurí, Esmeralda, Dec. 13, 1978 (C. J. Becker, MCN), 1♀. **Chile:** *Bío-Bío:* 2–5 km E El Abanico, Nov. 20–21, 1981, elevation 760–975 m, under rocks on scrubby mountainside (N. I. Platnick, R. T. Schuh, AMNH), 3♀♀. *Curicó:* Los Queñes, Jan. 1984 (E. A. Maury, MACN), 1♀. *Ñuble:* Las Trancas, Nov. 15, 1981, elevation 1, 280 m, under rocks in scrubby valley below beech forest (N. I. Platnick, R. T. Schuh, AMNH), 3♀♀; 40 km W Las Trancas, Nov. 15, 1981, elevation 1,370 m, under rock in scrubby valley (N. I. Platnick, R. T. Schuh, AMNH), 1♀; 10 km W Termas de



Figs. 5–8. *Eilica amambay,* new species. 5. Palp, ventral view. 6. Palp, retrolateral view. 7. Epigynum, ventral view. 8. Epigynum, dorsal view.

Chillán, Nov. 14, 1981, elevation 1,200 m, under rock in low beech forest (N. I. Platnick, R. T. Schuh, AMNH), 1♀.

Distribution. Chile, Argentina, and southeastern Brazil.

Eilica uniformis (Schiapelli and Gerschman)

Laronia uniformis Schiapelli and Gerschman, 1942:330, figs. 17–19 (female holotype from Colonia Dora, Santiago del Estero, Argentina, in MACN, examined).
Eilica uniformis: Platnick, 1975:9, figs. 18, 19.

New record. **Argentina:** *Misiones:* Yawi, Dec. 3–9, 1972 (E. A. Maury, MACN), 1♀.
Distribution. Known only from Argentina.

Eilica amambay, new species
Figs. 2, 5–8

Type. Male holotype from forest litter in the Parque Nacional Cerro Corá, Amambay, Paraguay (May 29–31, 1982; J. A. Kochalka), deposited in AMNH.

Etymology. The specific name is a noun in apposition taken from the type locality.

Diagnosis. The laterally directed spur at the base of the embolus of males (Fig. 5) and the anteriorly narrowed lateral epigynal margins of females (Fig. 7) are diagnostic.

Male. Total length 2.25–2.45. Carapace 1.01–1.15 long, 0.79–0.86 wide. Femur II 0.65–0.75 long (three specimens). Carapace dark olive brown; abdomen dark gray with white spots (Fig. 2); coxae and trochanters yellow on posterior legs, slightly darker on anteriors, femora dark brown, patellae light brown proximally, dark brown

distally, tibiae dark brown, metatarsi and tarsi brownish orange. Eye sizes and interdistances: AME 0.05, ALE 0.06, PME 0.07, PLE 0.06; AME–AME 0.04, AME–ALE 0.01, PME–PME 0.05, PME–PLE 0.04, ALE–PLE 0.04; MOQ length 0.13, front width 0.14, back width 0.18. Embolar base bearing laterally directed spur (Fig. 5); retrolateral tibial apophysis short, sharp (Fig. 6). Leg spination: femur IV p0-0-1, r0-0-0; tibiae: I v1p-1p-2; IV v0-0-2, r0-1-1; metatarsus IV p0-0-0, v1p-0-2, r0-0-1.

Female. Total length 2.74. Carapace 1.19 long, 0.85 wide. Femur II 0.76 long. Coloration as in male except metatarsus IV dark brown. Eye sizes and interdistances: AME 0.05, ALE 0.07, PME 0.06, PLE 0.07; AME–AME 0.05, AME–ALE 0.02, PME–PME 0.06, PME–PLE 0.05, ALE–PLE 0.05; MOQ length 0.15, front width 0.15, back width 0.18. Lateral epigynal margins abruptly narrowed anteriorly (Fig. 7); spermathecae bipartite (Fig. 8). Leg spination: femur II p0-0-0; tibiae: I v1p-1p-2; III, IV p0-0-1; metatarsi: II v1p-0-2; III, IV p0-0-0.

Other material examined. **Paraguay:** *Caaguazú:* 20 km N Colonel Oviedo, Oct. 8, 1979 (V. Mahnert, MHNG), 1♂. *Canindiyu:* Itanará, Oct. 27, 1979, elevation 430 m (V. Mahnert, MHNG), 1♀. *Central:* San Lorenzo, Sept. 20–30, 1982 (J. A. Kochalka, AMNH), 1♂. *Paraguarí:* Parque Nacional Ybyouí, Sept. 3–4, 1984 (J. A. Kochalka, AMNH), 1♂.

Distribution. Known only from Paraguay.

Eilica tikaderi Platnick

Eilica tikaderi Platnick, 1976a:189, figs. 1, 2 (female holotype from Pashan, Poona, Maharashtra, India, in Zoological Survey of India, examined). Platnick and Shadab, 1981:184, figs. 9, 10. Tikader, 1982:342, figs. 108–113.

New records. **India:** *Mysore:* Bangalore (P. P. Staunton, BMNH), 1♀. *West Bengal:* Calcutta, Nov. 1958 (N. L. H. Krauss, AMNH), 1♀.

Distribution. Known only from India.

Eilica albopunctata (Hogg)

Gnaphosoides albopunctata Hogg, 1896:333, fig. 18 (male holotype from Storm Creek, South Australia, in National Museum of Victoria, examined).
Eilica albopunctata: Platnick, 1975:14, figs. 6, 28, 29; 1978:226, figs. 1–3.

New records. **Australia:** *Queensland* (mideastern): Barracks, Upper Dry Creek, Kroombit Tops, 45 km SSW Calliope, Dec. 9–19, 1983, open sclerophyll forest on sandstone plateau (Monteith, Davies, Gallon, Thompson, QMB), 1♂; (southwestern): Jumbo Bore, Norley, Thargomindah, Sept. 28, 1983, pitfall traps around sub-artesian bore tank and overflow pond surrounded by molga red earth (B. R. Jahnke, QMB), 1♂; 55 km NW Bedourie, Oct. 16–23, 1979, pitfall traps, stony plain (S. Morton, QMB), 1♂. *Western Australia:* Wannamal, Nov. 11, 1976, under debris on flood plain with *Idiomyrex* present (J. Kethley, FMNH), 1♂.

Distribution. Known only from Australia (Queensland, South Australia, and Western Australia).

Eilica serrata Platnick

Eilica serrata Platnick, 1975:18, figs. 2, 7, 32, 33 (male holotype from Geraldton, Western Australia, in MCZ, examined); 1978:226, figs. 4–6.

New record. **Australia:** *Queensland* (southeastern): Mulgowie, Mar. 10, 1981, pitfall trap, sclerophyll (M. D. Grant, QMB), 1♀.

Distribution. Known only from Australia (southern Queensland and Western Australia).

Eilica contacta Platnick
Figs. 9, 10

Eilica contacta Platnick, 1975:15, figs. 34, 35 (female holotype from Dorrigo, New South Wales, Australia, in MCZ, examined).

Diagnosis. The large, scoop-shaped spur on the embolar base (Figs. 9, 10) is diagnostic of the male, which is matched here with *E. contacta* (previously known from females only) primarily on the basis of size and coloration, and which may therefore actually belong to an undescribed species instead.

Male. Total length 2.61. Carapace 1.22 long, 0.90 wide. Femur II 0.77 long. Carapace light brown; abdominal pattern indeterminate due to poor preservation; coxae light yellow, femora brown except for yellow proximal quarter of femur IV, patellae and tibiae light brown, metatarsi and tarsi brownish orange. Eye sizes and interdistances: AME 0.03, ALE 0.06, PME 0.05, PLE 0.07; AME–AME 0.06, AME–ALE 0.02, PME–PME 0.06, PME–PLE 0.05, ALE–PLE 0.05; MOQ length 0.15, front width 0.12, back width 0.15. Embolar base bearing large scoop-shaped spur (Fig. 9); retrolateral tibial apophysis oblique (Fig. 10). Leg spination: femur III p0-0-0; tibiae: I v1p-1p-2; II v1p-2-2; III v1p-2-2; IV p1-1-1; metatarsi: III p1-1-1, r0-1-1; IV p0-1-1, v0-2-2, r1-1-0.

Female. Described by Platnick (1975).

New records. **Australia:** *Queensland* (mideastern): Northern Escarpment, Kroombit Tops, 45 km SSW Caliope, Dec. 11–18, 1983, pitfall, open sclerophyll forest on sandstone plateau (Monteith, Davies, Gallon, Thompson, QMB), 2♀♀; (southwestern): 55 km NW Bedourie, Aug. 7–13, 1980, pitfall trap, stony plain (S. Morton, QMB), 1♂.

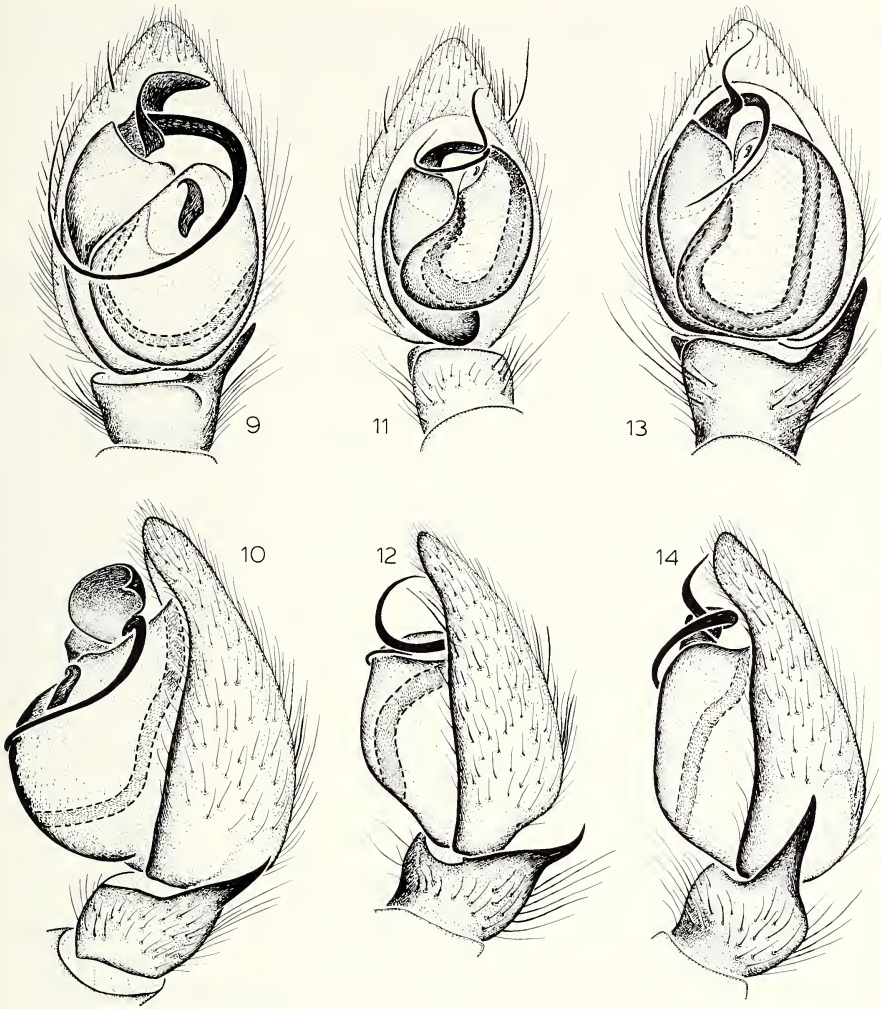
Distribution. Known only from Australia (Queensland and northern New South Wales).

Eilica daviesae, new species
Figs. 3, 11, 12

Type. Male holotype from a pitfall trap along dry gully in sparse mulga land at Central Tank, "Orient," in the Grey Range of southwestern Queensland, Australia (September 1983; B. R. Jahnke), deposited in QMB.

Etymology. The specific name is a patronym in honor of Dr. Valerie Davies of the Queensland Museum, who first recognized the species.

Diagnosis. This small species seems most closely related to *E. bedourie,* new species,



Figs. 9–14. 9, 10. *Eilica contacta* Platnick. 11, 12 *E. daviesae,* new species. 13, 14. *E. bedourie,* new species. 9, 11, 13. Palp, ventral view. 10, 12, 14. Palp, retrolateral view.

with which it shares the long, sinuous spur at the embolar base (Fig. 11), but can be distinguished by the dorsally directed retrolateral tibial apophysis (Fig. 12).

Male. Total length 1.89. Carapace 0.94 long, 0.79 wide. Femur II 0.65 long. Carapace brown with darker reticulations; abdomen black with white markings (Fig. 3); legs brown with tarsi lightened. Eye sizes and interdistances: AME 0.04, ALE 0.06, PME 0.04, PLE 0.07; AME–AME 0.04, AME–ALE 0.03, PME–PME 0.04, PME–PLE 0.05, ALE–PLE 0.08; MOQ length 0.11, front width 0.11, back width 0.12. Embolus short, weak, bearing long, sinuous spur at base (Fig. 11); retrolateral

tibial apophysis relatively long, directed dorsally (Fig. 12). Leg spination: tibia III d1-0-0, r0-0-1; metatarsi: I, II v1r-0-2; III v1p-0-2; IV v1p-1p-2, r0-0-0.

Female. Unknown.

Other material examined. None.

Distribution. Known only from southwestern Queensland.

Eilica bedourie, new species
Figs. 4, 13, 14

Type. Male holotype from a pitfall trap on a sandy ridge 55 km northwest of Bedourie, southwestern Queensland, Australia (June 6–12, 1980; S. Morton), deposited in QMB.

Etymology. The specific name is a noun in apposition taken from the type locality.

Diagnosis. This small species seems closest to *E. daviesae,* new species, but can be distinguished by the distally directed retrolateral tibial apophysis (Fig. 14).

Male. Total length 2.41. Carapace 0.93 long, 0.77 wide. Femur II 0.73 long. Carapace light brown with darker reticulations; abdomen brownish gray with white markings (Fig. 4); legs light brown with metatarsi and tarsi lightened. Eye sizes and interdistances: AME 0.03, ALE 0.05, PME 0.04, PLE 0.06; AME–AME 0.04, AME–ALE 0.03, PME–PME 0.05, PME–PLE 0.04, ALE–PLE 0.11; MOQ length 0.12, front width 0.10, back width 0.13. Embolus short, weak, bearing long, sinuous spur at base (Fig. 13); retrolateral tibial apophysis relatively long, directed distally (Fig. 14). Leg spination (tibiae and metatarsi III and IV missing): tibiae: I p1-0-1, v0-1r-2; II p0-0-1, v0-1r-2.

Female. Unknown.

Other material examined. None.

Distribution. Known only from southwestern Queensland.

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